

REMARKS

Claim 3 has been canceled. Claims 1, 2 and 7-26 are pending in the present application. Reconsideration is respectfully requested.

The present invention relates to a sheet for the covering of the skin or hair and provides for the delivery of medicinal agents to the skin or hair.

Specification

Page 15 and Tables 1-4 of the text have been amended in order to correct the trade-named materials in the specification and tables. It is noted, however, that the tables contain the chemical name of each of the named materials. Accordingly, upon entry of the amendments, the issue that has been raised is obviated.

Claim Objection

The objection to Claim is obviated by its cancellation. Withdrawal of the objection is respectfully requested.

Claim Amendments

The oily component of the composition of the invention has also been amended by deleting the term "hydrocarbon" in favor of more specific oily materials described at page 7, lines 5-7 of the specification.

The definition of the ester oily ingredients has also been clarified and entry of these amendments into the record is respectfully requested.

Claims 1 and 24 have also been amended to recite that the sheet product of the invention does not stick or adhere to the skin or hair when applied to portions of the body.

Appln No. 09/623,485
Reply to the Office Action of May 25, 2004

Support for this amendment can be found on page 9, lines 21-22 and the sentence bridging pages 10 and 11 of the text. Entry of the amendment is requested.

Claim Rejection, 35 USC 112, First Paragraph

Applicants do not concur that the present specification is not enabling with respect to the number of varies each of the thermoplastic resin component, the oily ingredient and medicinal ingredient (B). In this regard it is noted that not one individual material that falls within the definition of each of the generically named ingredients is an unknown material. All of the individually named resin materials are, in fact, known as thermoplastic resins. Given that several of the resins have been specifically shown in the examples as useful in preparing the product of the invention, there is no reason to have significant doubt that other thermoplastic resins would also not be likewise useful in the preparation of the product of the invention. Note the fact that the Suzuki et al patent describes several different types of thermoplastic synthetic resins of significantly different type are useful for extrusion into sheet products of the invention described therein. This fact contradicts the Examiner's comment of paragraph 5 at page 5 of the Office Action where it is stated that it is not obvious that other thermoplastic resins would work in view of the disclosure of polyolefins and EVA copolymers in the present specification. The Examiner has given no reason why, in fact, thermoplastic resins mentioned, but not employed in the examples of the application, would not be similarly useful as polyolefins and EVA copolymers.

Much the same thing is true with respect to the oily ingredient. It should be noted in addition that all of the medicinal agents and oily ingredients mentioned have been successfully used many times as components of a vast variety of cosmetic and medicinal formulations. Applicants therefore submit that given the description of these medicinal

materials and oily ingredients in the present specification, one of skill in the art would have no significant doubts as to the combination of these ingredients with a thermoplastic resin to prepare a useful composition. In fact, the Chan et al reference that has been cited and applied against the present claims shows the combination of various therapeutic materials in combination with a resinous material that is sticky or tacky for application to the skin. It is submitted that this disclosure is fully enabling as to the scope of the described and claimed invention. Accordingly, the rejection of the claims based on a non-enabling disclosure is believed without merit and withdrawal of the rejection of the claims is respectfully requested.

With respect to the specific issue of the meaning of the terms EPDM and EPM in Claim 10, applicants point out that these are the initials of the very well known materials known as ethylene/propylene/diene monomer rubber (EPDM) and ethylene/propylene monomer rubber (EPM). The specification at page 5 has been amended accordingly. Entry of the amendments and withdrawal of the issue are respectfully requested.

As to the matter of the terms "monoester" and "diester," the claims have been amended by deleting these terms in favor of language which describes the ester materials that are used as an oily ingredient. Withdrawal of the objection is respectfully requested.

Invention

The claimed invention is a sheet for covering the skin or hair that in one embodiment as claimed contains a thermoplastic resin, a medical ingredient, and an oily ingredient all present in a single-layered structure. The thermoplastic resin, a medical ingredient, and an oily ingredient are all defined in Claim 1. An outstanding feature of the present sheet as claimed in Claim 1 is that it has a modulus of from 1 to 2000 cN/10 mm when the sheet is stretched by 50 %. Moreover, the sheet product of the invention when applied to a portion of

the human body does not adhere to stick to the body because of a innate tackiness of the product.

In another embodiment of the invention as claimed in new Claim 24, the sheet product of the invention is claimed in terms of the manner in which it is made. As in the case of Claim 1, the sheet product has a modulus ranging from 1 to 2000 cN/10 mm when the sheet is stretched by 50 % and is such that it conforms to the skin or hair when applied to the skin or hair.

Prior Art Rejection, 35 USC 103

Claims 1-3, 24 and 25 stand rejected based on 35 USC 102 as anticipated by Suzuki et al, U.S. Patent 3,725,520. This ground of rejection is respectfully traversed.

Although the Suzuki et al patent discloses a synthetic thermoplastic sheet that is air permeable wherein the sheet is formulated of a thermoplastic resin whose scope is described in column 4, nevertheless the thermoplastic resin employed is formulated with a particulate filler and an organic solvent. As explained at column 3, lines 36-51 of the patent, the presence of the filler results in a stretched polymer product that is air permeable because of the uneven or not smooth flow of polymer of the film when it is stretched. Accordingly, it is clear that the sheet product of the reference does not anticipate the sheet product of the present invention that does not contain a filler, rather one or more of a variety of medicinal agents, and which is formulated with an oily ingredient to soften the sheet product that is manufactured.

As to the matter of the definition of the UV absorber of the present claims, note that the sheet product is limited to organic UV absorbers as disclosed at page 7, lines 16-18 of the text, which means that none of the inorganic UV oxides of the patent are within the scope of

Appln No. 09/623,485
Reply to the Office Action of May 25, 2004

the present claims. Moreover, none of the organic solvents disclosed by the patent at column 4 are within the scope of the definition of oily ingredient of the present claims. Moreover, the presence of both an organic solvent and an inert filler is excluded from the scope of the present claims by the transitional phrase now used in Claim 1. Accordingly, the Suzuki et al patent is believed not to anticipate the invention as claimed and withdrawal of the rejection is respectfully requested.

Claims 1-3 and 24-26 stand rejected based on 35 USC 103 as obvious over Quan et al, U.S. Patent 6,180,133. This ground of rejection is respectfully traversed.

The Quan et al patent is relevant to the present invention insofar as it discloses a composition for the treatment of the skin. As such, a composition is disclosed that treats wrinkles in the skin. The objective of the patent is achieved by a formulation of Vitamin C ester, Vitamin E, glycerin and an adhesion adjusting agent in a pressure-sensitive adhesive which is identified as a polydiorganosiloxane. A number of examples of compositions of the reference are presented in the patent. Note that the tacky or adhesive ingredient in these compositions is the likes of Duro-Tak 87-2196, Nacor 72-8725, Nacor 72-9965 and Robond PS-20. All of these tacky resins adhere to the skin when applied. However, as now specified in Claims 1 and 24, the thermoplastic resin is not one which is tacky or adhesive to the skin. Thus, the resinous material of the composition of the reference does not qualify as a thermoplastic resin within the scope of the present claims. Moreover, even though polydimethylsiloxanes are mentioned as silicone oils, such materials are not within the scope of the definition of oily ingredients of the present sheet product as claimed. Accordingly, the Quan et al patent does not suggest the invention as claimed and withdrawal of the rejection is respectfully requested.

Appln No. 09/623,485
Reply to the Office Action of May 25, 2004

Claims 7-10 stand rejected based on 35 USC 103 as obvious over Quan et al, 133 or Suzuki et al 520 in view of Watanabe 550. This ground of rejection is respectfully traversed.

Claims 7-10 are directed to a specific dependent embodiment of the invention in which the thermoplastic resin component further comprises a thermoplastic elastomer. As has been observed above, Quan et al discloses a sticky or tacky resin which is not within scope of the thermoplastic resin material of the present claims, and although Suzuki et al discloses a variety of thermoplastic resins from which an air permeable sheet is formed, nevertheless, the product of the reference does not contain either medicinal ingredients or an oily ingredient. Neither of the two primary references even remotely suggests a thermoplastic sheet which is so formulated as to additionally contain a thermoplastic elastomer as defined in present Claims 7-10. Watanabe does not improve upon these deficiencies because it discloses molded objects prepared from cross-linked polystyrene based elastomer. This is not a material that would be useful as a thermoplastic resin for the preparation of the present sheet product. Accordingly, the invention embodiments claimed in the dependent claims is not suggested by the combined disclosures. Withdrawal of the rejection is respectfully requested.

Appln No. 09/623,485

Reply to the Office Action of May 25, 2004

It is believed that the application is in proper condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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